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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 12/21/2009

ALBERT PETER DURIGON
20 EUSTIS STREET
CAMBRIDGE, MA 021402387

EXAMINER

FAULK, DEVONA E

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 12/21/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/159,520

09/23/1998

TROY GENE ANDERSON

HW-106-CIP

5244

TITLE OF INVENTION: DIGITAL SOUND RELAXATION AND SLEEP-INDUCING SYSTEM AND METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$0	\$0	\$755	03/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 12/21/2009

ALBERT PETER DURIGON
20 EUSTIS STREET
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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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09/159,520	09/23/1998	TROY GENE ANDERSON	HW-106-CIP	5244

TITLE OF INVENTION: DIGITAL SOUND RELAXATION AND SLEEP-INDUCING SYSTEM AND METHOD

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nonprovisional	YES	\$755	\$0	\$0	\$755	03/22/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
FAULK, DEVONA E	2614	381-061000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER

FAULK, DEVONA E

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 12/21/2009

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

09/159,520

Applicant(s)

ANDERSON ET AL.

Examiner

Art Unit

DEVONA E. FAULK

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 12/8/09.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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1. Applicant's arguments, regarding the newly recited claim language found in claims 1 and 3, filed 12/8/09, with respect to the 103 rejection have been fully considered and are persuasive. The rejections of claims 1-3 have been withdrawn.
2. Applicant's arguments, regarding claim 5, filed 12/8/09 have been fully considered but they are not persuasive.
3. The applicant agreed to an examiner's amendment to place the claims in allowable form.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Albert Peter Durigon (Reg. No. 30.049) on 12/10/09.

5. **The claims are to be amended as follows:**

Claim 5: CANCEL.

Claim 1 is to be amended to recite the following:

A digital sound [relaxation and sleep-inducing] machine for inducing sleep, comprising:
a housing; at least one speaker for reproducing sounds; a digital memory storing

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samples to be replayed of sounds previously recorded at a record rate that each contain start and end sounds that are acoustically seamless and that last a certain duration at said record rate;

at least one selector switch; and a processor-implemented sound controller mounted to said housing and connected to said digital memory, to said at least one selector switch and to said speaker and operative in sleep-induce mode, in response to user-input control selection entered via said at least one selector switch, (1) to replay the sound sample selected repetitively for a first time interval greater than the sample duration at the record rate the whole number of times that the sample duration is contained within the first time interval, and (2) to replay the sound sample for a second time interval that consists of a certain number of third time intervals during which, for every third time interval less than said second time

interval, the sound sample is replayed at another, progressively slower rate the whole number of times that the selected sample duration, factored by the ratio of said record and each another. progressively slower rate, is contained within each said third time interval, wherein said certain number of third time intervals and each said another , progressively slower rate are selected to ~~so~~ replay the selected sound sample as to induce sleep as it is replayed at each progressively slower rate each said whole number of times the duration of the selected sound sample, factored by the ratio of said record and each another, progressively slower rate, is contained in each said third time interval of said second interval.

Claim 2 is to be amended to recite the following:

A method of playing a prerecorded sound to induce such a deep relaxation state that helps a listener to fall asleep, comprising the steps of:

storing a sample to be replayed of a sound previously recorded at a record rate in digital memory of a sound conditioning machine in such a way that said sample contains start and end sounds that are acoustically seamless and lasts for certain duration at the record rate;

replaying the sound sample repetitively for a first time interval greater than the sample duration at the record rate the whole number of times that the sample duration is contained within the first time interval; and replaying the sound sample for a second time interval that consists of a certain number of third time intervals during which, for every third time interval less than said second time interval, the sound sample is replayed at another, progressively slower rate the whole number of times that the sample duration, factored by the ratio of said record and each another, progressively slower rate,

is contained within each said third time interval, wherein said certain number of third time intervals and each said another, progressively slower rate are selected to ~~so~~ replay the selected sound sample as to induce sleep as it is replayed at each progressively slower rate each said whole number of times the duration of the selected sound sample, factored by the ratio of said record and each another, progressively slower rate, is contained in each said third time interval of said second interval.

Claim 3 is to be amended to recite the following:

A digital sound [relaxation and sleep-inducing] machine for inducing sleep, comprising:
a housing; at least one speaker for reproducing sounds; at least one selector switch; at least one memory having digitally stored sounds selectable for replay; and a processor-implemented sound controller mounted to said housing and electrically connected to said at least one memory, said at least one speaker, and said at least one selector switch operative in one of a sound relaxation and noise masking mode= and a sleep-induce mode= such in response to user-input control selections entered via said at least one selector switch;

said processor-implemented sound controller is operative in said sound relaxation and noise masking mode (1) to retrieve from said memory a sound selected for replay and (2) to replay it continually and without disrupting pauses so as to induce relaxation and to mask noise;

said processor-implemented sound controller is operative in said sleep-induce mode (1) to retrieve from said memory a sound selected for replay, (2) to replay it continually and without

disrupting pauses so as to induce relaxation and to mask noise for a first time interval, and (3) for a second time interval, (I) to select a slower replay rate, (ii) to replay said selected sound continuously and without disrupting pauses at said slower replay rate for a third time interval and (iii) to repeat steps (I) and (ii) for the duration of said second

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time interval so that the progressively slower sound replay and the listener's biorhythms synergistically co-act to induce such a state of deep relaxation that aids the listener to fall asleep; wherein each sound stored in said digital memory is a sample to be replayed of a sound previously recorded at a record rate; wherein each said sample contains start and end sounds that are acoustically seamless and lasts for a certain duration at said record rate; wherein said second time interval consists of a certain number of said third time intervals; wherein said processor-implemented sound controller in said sleep-induce mode (1) is operative to replay the selected sound sample repetitively for said first time interval greater than the sample duration at the record rate the whole number of times that the selected sample duration is contained within the first time interval, and (2) is operative to replay the sound sample for said second time interval that consists of said certain number of third time intervals during which, for every third time interval ~~less than said second time interval~~, the sound sample is replayed at another, progressively slower rate the whole number of times that the sample duration, factored by the ratio of said record and each another, progressively slower rate, is contained within each said third time interval, wherein said certain number of third time intervals and each said another, progressively slower rate are selected to so replay the selected sound sample as to induce sleep as it is replayed at each progressively slower rate each said whole number of times the duration of the selected sound sample, factored by the ratio of said record and each another, progressively slower rate, is contained in each said third time interval of said second interval.

Allowable Subject Matter

6. Claims 1-3 are allowed.

7. The following is an examiner's statement of reasons for allowance: Regarding claims 1-3, the applicant's admitted prior art discloses digital sound relaxation devices including the Marsona 1250, Tranquil Moments TM-500 Sound Relaxation System, and the Digital Sound Soother XS which disclose a housing, at least one speaker, a digital memory for storing samples of sounds to be replayed continuously, at least one selector switch to select the sound to be replayed and a sound controller (page 1, line 10-page 4, line 8). Prior art Davis discloses a method for achieving Alpha and Theta brainwave states, which were commonly known in the art to bring about relaxation. As taught in the abstract and column 2 lines 50-55, musical composition is recorded for playback which has an initial tempo which is decreased to a final tempo. Also taught in column 3 lines 20-26, an user's brainwave cycles will try to synchronize with the tempo of the music. Prior art Hatta et al, US Patent 4,589,779 discloses that conventional alarm clocks were designed so that a stored message could be selected from a plurality of messages and be outputted at a certain time.

Regarding claims 1 and 2, the prior art or combination thereof fails to disclose or make obvious said certain number of third time intervals and each said another progressively slower rate are selected to replay the selected sound sample as to induce sleep as it is replayed at each progressively slower rate each said whole number of times the duration of the selected sound sample, factored by the ratio of said record and each

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another progressively slower rate, is contained in each said third time interval of said second interval.

Regarding claim 3, the prior art or combination thereof fails to disclose or make obvious wherein each sound stored in said digital memory is a sample to be replayed of a sound previously recorded at a record rate: wherein each said sample contains start and end sounds that are acoustically seamless and lasts for a certain duration at said record rate; wherein said second time interval consists of a certain number of said third time intervals; wherein said processor-implemented sound controller in said sleep-induce mode (1) is operative to replay the selected sound sample repetitively for said first time interval greater than the sample duration at the record rate the whole number of times that the selected sample duration is contained within the first time interval, and (2) is operative to replay the sound sample for said second time interval that consists of said certain number of third time intervals during which, for every third time interval the sound sample is replayed at another progressively slower rate the whole number of times that the sample duration, factored by the ratio of said record and each another progressively slower rate, is contained within each said third time interval, wherein said certain number of third time intervals and each said another, progressively slower rate are selected to so replay the selected sound sample as to induce sleep as it is replayed at each progressively slower rate each said whole number of times the duration of the selected sound sample, factored by the ratio of said record and each another,

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progressively slower rate, is contained in each said third time interval of said second interval.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/
Primary Examiner, Art Unit 2614